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[Armstrong93] J. Armstrong, R. Virding, and M. Williams, <u>Concurrent Programming in ERLANG</u>, Prentice-Hall International, 1993.

[Barstow85]   D. Barstow, "Domain-Specific Automatic Programming", *IEEE Transactions on Software Engineering*, November 1985, pp. 1321-1336.

[Barstow91] D. Barstow, "Automatic Programming for Device-Control Software", in <u>Automating Software Design</u>, M. R. Lowry and R. D. McCartney (eds.), AAAI Press, Menlo Park, California, 1991, pp. 123-1140.

[Beregi84]   W. E. Beregi, "Architectural prototyping in the software engineering environment", *IBM Systems Journal*, Vol. 23, No. 1, 1984, pp. 4-18.

[Bollinger88] J.G. Bollinger and N. A. Duffe, <u>Computer Control of Machines and Processes</u>, Addison-Wesley, 1988.

[Boloix92] G. Boloix, P. G. Sorenson, and J. P. Tremblay, "Transformations using a meta-system approach to software development", *Software Engineering Journal*, November 1992, pp. 425-437.

[Booch86] G. Booch, "Object-Oriented Development", *IEEE Transactions on Software Engineering*, February 1986, pp. 211-221.

[Booch91] G. Booch, <u>Object Oriented Design With Applications</u>, Benjamin/Cummings, Redwood City, California, 1991.

[Brackett87]   J. W. Brackett, <u>Automobile Cruise Control and Monitoring System Example</u>, Tech. Rep. TR-87-06, Wang Institute of Graduate Studies, Tyngsboro, MA, 1987.

[Buhr84] R. J. A. Buhr, <u>System Design With Ada</u>, Prentice-Hall, Englewood Cliffs, NJ, 1984.

[Caromel93]   D. Caromel, "Toward a methodology of object-oriented concurrent programming", *Communications of the ACM*, Vol. 36 No. 9, Sept. 1993, pp. 90-102.

[Carter88]   J. R. Carter, "MMAIM: a software development method for Ada", *Ada Letters*, Vol. 8 No. 3 May/June 1988 and Vol. 8 No. 4 August/September 1988, pp. 47-60.

[Cherry86] G. Cherry, <u>PAMELA Designer's Handbook</u>, TASC, Reston, VA, 1986.

[Coad91]   P. Coad and E. Yourdon, *Object-Oriented Analysis*, Yourdon Press, Englewood Cliffs, New Jersey, 1991.

[Coad92] P. Coad, "Object-Oriented Patterns", *Communications of the ACM*, September 1992, pp. 152-159.

[DeMarco78] T. DeMarco, <u>Structured Analysis and System Specification</u>, Prentice-Hall, Englewood Cliffs, New Jersey, 1978.

[Dillon90]   L. K. Dillon, "Verifying General Safety Properties of Ada Tasking Programs", *IEEE Transactions on Software Engineering*, January 1990, pp. 51-63.

[Estrin86] G. Estrin, R. S. Fenchel, R. R. Razouk, and M. K. Vernon, "SARA (System ARchitects Apprentice): Modeling, Analysis, and Simulation Support for Design of Concurrent Systems", *IEEE Transactions on Software Engineering*, February 1986, pp. 293-311.

[Fickas90] S. Fickas and R. Helm, <u>A Transformational Approach to Composite System Specification</u>, University of Oregon, Technical Report CIS-TR-90-19, November 1990.

[Fickas92] S. Fickas and R. Helm, "Knowledge Representation and Reasoning in the Design of Composite Systems", *IEEE Transactions on Software Engineering*, June 1992, pp. 47-482.

[Fischer92] G. Fischer and A. Girgensohn, K. Nakakoji, and D. Redmiles, "Supporting Software Designers with Integrated Domain-Oriented Design Environments", *IEEE Transactions on Software Engineering*, June 1992, pp. 511-522.

[Freeman78]   P. Freeman, "Software Design Representation: Analysis and Improvements", *Software - Practice and Experience*, August 1978, pp. 501-511.

[Freeman80]   P. Freeman, "The Nature of Design", <u>Tutorial on Software Design Techniques</u>, (Freeman and Wasserman, editors), IEEE Computer Society, April 1980, pp. 46-53.

[Gomaa84]   H. Gomaa, "A Software Design Method for Real-Time Systems", *Communications of the ACM*, September 1984, pp. 938-949.

[Gomaa93]   H. Gomaa, <u>Software Design Methods for Concurrent and Real-Time Systems</u>, Addision-Wesley Publishing Company, Reading Massachusetts, 1993.

[Gomaa94] H. Gomaa, "Software design methods for the design of large-scale real-time systems", *Journal of Systems and Software*, June 1994, pp. 127-146.

[Hatley87] D. J. Hatley and I. A. Pirbhai, <u>Strategies for Real-Time System Specification</u>, Dorset House, 1987.

[Howes90] N. R. Howes, "Toward a real-time Ada design methodology", *Proceedings of the ACM Tri-Ada Conference*, Baltimore, MD, December 1990, pp. 189-203.

[Ingevaldsson79]   L. Ingevaldsson, <u>JSP: A Practical Method of Program Design</u>, Chartwell-Bratt, Brookfield, VT, 1979.

[Jackson75]   M. Jackson, <u>Principles of Program Design</u>, Academic Press, New York, 1975.

[Jackson83]   M. Jackson, <u>System Development</u>, Prentice-Hall, Englewood Cliffs, NJ, 1983.

[Jones89] D. Jones, "To task or not to task", *Journal of Pascal, Ada, and Modula-2*, September/October 1989, pp. 61-63.

[Jones90] D. Jones, "A practical cruise control", *Journal of Pascal, Ada, and Modula-2*, January/February 1990, pp. 40-44.

[Jones94] D. Jones, "Cruising with Ada", *Embedded Systems Programming*, Vol. 7 No. 11, November 1994, pp. 18-44.

[Kant91] E. Kant, F. Daube, W. MacGregor, and J. Wald, "Scientific Programming by Automated Synthesis", in *Automating Software Design*, M. R. Lowry and R. D. McCartney (eds.), AAAI Press, Menlo Park, California, 1991, pp. 141-168.

[Karam91] G. Karam and R. Buhr, "Temporal Logic-Based Deadlock Analysis for Ada", *IEEE Transactions on Software Engineering*, October 1991, pp. 1109-1125.

[Karimi88] J. Karimi and B. R. Konsynski, "An Automated Software Design Assistant", *IEEE Transactions on Sofware Engineering*, February 1988, pp. 194-210.

[Knuth68] D. E. Knuth, <u>Fundamental Algorithms</u>, Addision-Wesley, 1968.

[Levi90] S-T Levi and A. K. Agrawala, <u>Real-Time System Design</u>, McGraw-Hill, New York, 1990.

[Lien92]   C. Lien and C. Yang, "Specification and Quality Assurance of Timing Constraints in Real-Time Systems Development", *Software--Practice and Experience*, November 1992, pp. 963-984.

[Liu90] L. Y. Liu and R. K. Shyamasundar, "Static Analysis of Real-Time Distributed Systems", *IEEE Transactions on Software Engineering*, April 1990, pp. 373-388.

[Lor90]   K. E. Lor and D. M. Berry, "Automatic Synthesis of SARA Design Models From Systems Requirements", *IEEE Transactions on Software Engineering*, December 1991, pp. 1229-1240.

[Marques92]   D. Marques, G. Dallemagne, G. Klinker, J. McDermott, and D. Tung, "Easy Programming Empowering People to Build Their Own Applications", *IEEE Expert*, June 1992, pp. 16-29.

[Mellor86] S. J. Mellor and P. T. Ward, <u>Structured Development for Real-Time Systems, Vol. 3: Implementation Modeling Techniques</u>, Yourdon Press, Englewood Cliffs, NJ, 1986.

[Meyer93]   B. Meyer, "Systematic concurrent object-oriented programming", *Communications of the ACM*, Vol. 36 No. 9, September 1993, pp. 56-80.

[Murata84] T. Murata, "Modeling and Analysis of Concurrent Systems", <u>Handbook of Software Engineering</u>, (Vick and Ramamoorthy, editors), Van Nostrand Reinhold, New York, 1984, pp. 49-63.

[Murata89] T. Murata, "Petri Nets: Properties, Analysis, and Applications", *Proceedings of the IEEE*, April 1989, pp. 541-580.

[Natarajan92]   S. Natarajan and W. Zhao, "Issues in Building Dynamic Real-Time Systems", *IEEE Software*, September 1992, pp. 16-21.

[NASA93]   National Aeronautics and Space Administration, Software Technology Branch, <u>CLIPS Reference Manual</u>, Three Volumes, CLIPS Version 6.0, June 2, 1993.

[Nielsen87]   K. Nielsen and K. Shumate, "Designing Large Real-Time Systems With Ada", *Communications of the ACM*, August 1987, pp. 695-715.

[Nielsen88] K. Nielsen and K. Shumate, <u>Designing Large Real-Time Systems With Ada</u>, McGraw-Hill, New York, 1988.

[Obenza93]   R. Obenza, "Rate monotonic analysis for real-time systems", *IEEE Computer*, March 1993, pp. 73-74.

[Parnas72] D. L. Parnas, "On the Criteria To Be Used in Decomposing Systems into Modules", *Communications of the ACM*, December 1972.

[Parnas79] D. L. Parnas, "Designing Software for Ease of Extension and Contraction", *IEEE Transactions on Software Engineering*, March 1979.

[Peng93]   D. Peng and K. Shin, "Optimal Scheduling of Cooperative Tasks in a Distributed System Using an Enumerative Method", *IEEE Transactions on Software Engineering*, March 1993, pp. 253-267.

[Pospischil92]   G. Pospischil, P. Puschner, A. Vrchoticky, and R. Zainlinger, "Developing Real-Time Tasks with Predictable Timing", *IEEE Software*, September 1992, pp. 35-44.

[Rich88]   C. Rich and R. C. Waters, "The Programmer's Apprentice: A Research Overview", *Computer*, November 1988, pp. 10-25.

[Rich88a] C. Rich and R. C. Waters, "Automatic Programming: Myths and Prospects", *Computer*, August 1988, pp. 40-51.

[Rich92] C. Rich and Y. Feldman, "Seven Layers of Knowledge Representation and Reasoning in Support of Software Development", *IEEE Transactions on Software Engineering*, June 1992, pp. 451-469.

[Rumbaugh91] J. Rumbaugh, M. Blaha, W. Premerlani, F. Eddy, and W. Lorensen, <u>Object-Oriented Modeling and Design</u>, Prentice-Hall, Englewood Cliffs, New Jersey, 1991.

[Sanden89] B. Sanden, An Entity-life modeling approach to the design of concurrent software", *Communications of the ACM*, March 1989, pp. 330-343.

[Sanden89a]   B. Sanden, "Entity-life modeling and structured analysis in real-time software design: a comparison", *Communications of the ACM*, December 1989, pp. 1458-1466.

[Sanden94]   B. Sanden, <u>Software Systems Construction with Examples in Ada</u>, Prentice-Hall, 1994.

[SEI92] Software Engineering Institute, <u>The Handbook of Real-Time Systems Analysis: Based on the Principles of Rate Monotonic Analysis</u>, Technical Report (Draft), July 1992.

[Setliff91] D. Setliff, "On the Automatic Selection of Data Structure and Algorithms", in <u>Automating Software Design</u>, M. R. Lowry and R. D. McCartney (eds.), AAAI Press, Menlo Park, California, 1991, pp. 207-226.

[Sha90] L. Sha and J. B. Goodenough, "Real-Time Scheduling Theory and Ada", *IEEE Computer*, April 1990, pp. 53-62.

[Shaw95] M. Shaw, <u>Candidate Model Problems in Software Architecture</u>, Computer Science Dept., Carnegie-Mellon University, Pittsburgh, PA, 1995.

[Shlaer92] S. Shlaer and S. J. Mellor, <u>Object Lifecycles - Modeling the World in States</u>, Yourdon Press, Englewood Cliffs, New Jersey, 1992.

[Shepard91] T. Shepard and J. A. Martin Gagne, "A Pre-Run-Time Scheduling Algorithm for Hard Real-Time Systems", *IEEE Transactions on Software Engineering*, July 1991, pp. 669-677.

[Shumate92] K. Shumate and M. Keller, <u>Software Specification and Design: A Disciplined Approach for Real-Time Systems</u>, Wiley, 1992.

[Simon81] H. A. Simon, <u>The Sciences of the Artificial</u>, The MIT Press, Cambridge, Massachusetts, 1981.

[Smith88] S. L. Smith and S. Gerhart, "STATEMATE and cruise control: A case2 study", *Proceedings of CompSac 88*, IEEE Computer Society, Silver Spring, MD, 1988, pp. 49-56.

[Smith91] D. R. Smith, "KIDS - A Knowledge-Based Software Development System", in <u>Automating Software Design</u>, M. R. Lowry and R. D. McCartney (eds.), AAAI Press, Menlo Park, California, 1991, pp. 483-514.

[Smith93] C. U. Smith and L. G. Williams, "Software performance engineering: A case study including performance comparison with design alternatives", *IEEE Transactions on Software Engineering*, Vol. 19 No. 7, July 1993, pp. 720-741.

[Stay76] J. F. Stay, "HIPO and integrated program design", *IBM Systems Journal*, Vol. 15 No. 2, 1976.

[Tsai88]   J. P. Tsai and J. C. Ridge, "Intelligent Support for Specifications Transformation", *IEEE Software*, November 1988, pp. 28-35.

[Ward85] P. Ward and S. Mellor, <u>Structured Development for Real-time Systems</u>, Four Volumes, Prentice-Hall, Englewood Cliffs, New Jersey, 1985.

[Waters91] R. Waters and Y. Tan, "Toward a Design Apprentice: Supporting Reuse and Evolution in Software Design", *Software Engineering Notes*, April 1991, pp. 33-44.

[Willson90] R. G. Willson and B. Krogh, "Petri Net Tools for the Specification and Analysis of Discrete Controllers", *IEEE Transactions on Software Engineering*, January 1990, pp. 39-50.

[Xu93] J. Xu and D. L. Parnas, "On Satisfying Timing Constraints in Hard-Real-Time Systems", *IEEE Transactions on Software Engineering*, January 1993, pp. 70-84.

[Young82]   S. J. Young, <u>Real-time Languages: Design and Development</u>, Ellis Horwood, Chichester, West Sussex, England, 1982.

[Yourdon79]   E. Yourdon and L. L. Constantine, <u>Structured Design</u>, Prentice-Hall, Englewood Cliffs, New Jersey, 1979.

[Zave86]   P. Zave and W. Schell, "Salient Features of an Executable Specification Language and Its Environment", *IEEE Transactions on Software Engineering*, February 1986, pp. 312-325.